



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and **Rec'd PCT/PTO 02 FEB 2005**)

Applicant's or agent's file reference 1219-PCT10		FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. PCT/KR2003/001503	International filing date (day/month/year) 25 JULY 2003 (25.07.2003)	Priority date (day/month/year) 09 AUGUST 2002 (09.08.2002)	
International Patent Classification (IPC) or national classification and IPC IPC7 B65D 90/54			
Applicant S.J. KOREA CO., LTD. et al			

<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>4</u> sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of _____ sheets.</p>	
<p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the report</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>	

Date of submission of the demand 02 DECEMBER 2003 (02.12.2003)	Date of completion of this report 23 DECEMBER 2004 (23.12.2004)
Name and mailing address of the IPEA/KR  Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea Facsimile No. 82-42-472-7140	Authorized officer CHOI, Ki Hyuk Telephone No. 82-42-481-5894 

I. Basis of the report

1. With regard to the elements of the international application:*

☒ the international application as originally filed☐ the description:

pages _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____

☐ the claims:

pages _____, as originally filed
pages _____, as amended (together with any statement) under Article 19
pages _____, filed with the demand
pages _____, filed with the letter of _____

☐ the drawings:

pages _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____

☐ the sequence listing part of the description:

pages _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language English which is

☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).☒ the language of publication of the international application (under Rule 48.3(b)).☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.☐ filed together with the international application in computer readable form.☐ furnished subsequently to this Authority in written form.☐ furnished subsequently to this Authority in computer readable form.☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.4. ☐ The amendments have resulted in the cancellation of:☐ the description, pages _____☐ the claims, Nos. _____☐ the drawings, sheets _____5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed." and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item I and annexed to this report

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. Statement**

Novelty (N)	Claims	<u>1, 2</u>	YES
	Claims	<u>None</u>	NO
Inventive step (IS)	Claims	<u>1, 2</u>	YES
	Claims	<u>None</u>	NO
Industrial applicability (IA)	Claims	<u>1, 2</u>	YES
	Claims	<u>None</u>	NO

2. Citations and explanations (Rule 70.7)

The following documents identified in the International Search Report have been considered for the purpose of this report:

D1: US 6,233,984 B1

D2: US 4,581,907 A

1. Novelty

The invention of claim 1 is a cargo container door lock with theft prevention means comprising a handle hub and a rivet. Said handle hub is welded to one side of a locking rod, with a pair of fastening holes and a pair of circular recesses formed at opposite outer sides of the fastening hole. Said rivet is fastened through the fastening holes of the handle hub, and has a head to be fitted inside one of the circular recesses and an expanded piece at opposite side to the head to be fitted inside the other one of the circular recesses.

The invention of claim 2 is a cargo container door lock with theft prevention means comprising a handle hub and a handle. Said handle hub is welded to a locking rod and formed with a stopper protruding from a center portion thereof, the stopper being positioned near one side of a holding piece provided at a fixing plate associated with the handle.

D1 discloses a semitrailer cargo door locking system having a rotatable handle which is secured within a hasp mechanism comprising a rigid lower hasp and a swivelable upper hasp.

D2 discloses a protective device for padlocks applied to interlock relatively shiftable members to which cooperating releasably interfitting retainer parts are anchored.

(Continued in Supplemental Box.)

Supplemental Box
(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of:

BOX V.

The welded portion and the hinge in Fig. 1 of D1, and the welded portion and the hinge (58) in Fig. 8 of D2 are equivalent to the handle hub and the fastening hole of claim 1. And for the purpose of protecting a locking mechanism, the rigid lower hasp and the swivelable upper hasp of D1, and the retainer part (60) of D2 are equivalent to the stopper and the holding piece of claim 2.

However, the prior art documents D1 and D2 do not disclose any equivalent to the circular recesses of claim 1, and the position and shape of the stopper (430) are different from the position and shape of said hasp part or said retainer part (60).

Therefore, claims 1 and 2 satisfy PCT Article 33(2) in respect of novelty.

2. Inventive Step

The circular recesses of claim 1 which have a diameter larger than that of the fastening hole can accommodate a head and an expanded piece of rivet. Therefore, the rivet is prevented from being unnoticeably cut and removed without leaving clear evidence of tampering. The stopper protruding from a center portion of a handle also prevents complete separation between a handle and a holding piece, in case that the handle hub is cut from the locking rod unexpectedly. All these features are not obvious from the prior art documents D1 and D2. Therefore, claims 1 and 2 satisfy PCT Article 33(3) in respect of inventive step.

3. Industrial Applicability

The inventions of claims 1 and 2 relate to a cargo container door lock, which can effectively protect the contents of a cargo container, and clearly identify when tampering has forcibly occurred. Therefore, claims 1 and 2 possess industrial applicability according to PCT Article 33(4).